# Reasons for discontinuing contraception among women in Bangkok\*

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In an attempt to investigate in detail clients' reasons for discontinuing use of a particular contraceptive, a study was undertaken (i) to develop and test a system of classification that would allow precise categorization of individuals in the study, and (ii) to ascertain detailed medical and social reasons for discontinuing contraception. A total of 666 women, who had accepted a family planning method from one of 14 health clinics administered by the Bangkok Metropolitan Health Authority over a 6-month period in 1977, were traced and interviewed one year later. Of these, 46% were still using their initial method of contraception and their original supply source. A further 29% had changed either their method or their source of supply or both, and 26% were not using any contraception. The most frequent reason given for discontinuation referred to medical side-effects; the second most frequent reason was the woman's feeling that she had no need for contraception. However, the study indicated that preconceived ideas of a contraceptive method, rather than the side-effects experienced, may play a leading role in determining whether the method will continue to be used.

Although high contraceptive discontinuation rates are recognized as a major problem facing family planning programmes (1, 2), two recent reviews have concluded that published reports on the subject are of uneven quality, frequently methodologically weak, and provide insufficient information to answer the practical questions raised by programme administrators (3, C. Bleathman, unpublished observations, 1978). Reasons for contraceptive discontinuation are usually highly complex but research publications often group them under broad headings such as "medical" and "other". The term "discontinuation" itself often means different things in different studies. In an attempt to investigate in more detail clients' reasons for discontinuing a particular contraceptive, a study was undertaken in Bangkok at the

develop and test a precise system of classification that would allow categorization of the individuals in the study; and (b) to ascertain detailed reasons for discontinuing contraception and to classify these reasons into precise categories of use to family planning authorities. A particular effort was made to include psychosocial as well as medical and service-related reasons for discontinuation.

request of the Thai National Family Planning Pro-

gramme. The study had two main objectives: (a) to

### SAMPLING AND METHODOLOGY

A previous WHO-supported study, conducted in Bangkok health clinics (4), found that 59% of women taking oral contraceptives, 45% of those using injectable contraceptives, and 59% of those using an intrauterine device (IUD) were still using their original method one year after adoption. In addition, 67%, 76%, and 79%, respectively, were using some method of contraception at the one-year follow-up. These groups of protected women included those who had been sterilized or whose husband had had a vasectomy. The present study was carried out on a subgroup of the original study group.

Women who had accepted a family planning method from one of 14 health clinics administered by the Bangkok Metropolitan Authority over a 6-month

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period in 1977 were traced and interviewed one year later. The 14 clinics chosen were representative of the 35 family planning clinics in Bangkok, and there was no significant difference between the study group and the total clinic patient population.

It was calculated that a sample of about 650 women would be necessary for the analysis. To allow for the possibility that some women would not be traceable, a total of 900 subjects were selected for inclusion in the study: 300 who had originally chosen the IUD, 300 who had accepted oral contraceptives, and 300 who had received an injectable contraceptive, depotmedroxyprogesterone acetate (DMPA). This distribution of subjects underrepresents pill-users and overrepresents users of injectable contraceptives.

The data were collected between May and November 1978 by a group of 10 women with postsecondary schooling, who had been given 3 days' training in administering the 130-item questionnaire. The interviewers worked in teams of two, with one person asking the questions and the other recording the responses.

Three factors were taken into consideration:

- (a) whether the subject was using some form of contraception at the time of the interview;
- (b) if using contraception, whether the method being used was the one adopted 12 months previously;
- (c) if using contraception, whether supplies were still being obtained from the clinic attended 12 months previously.

In this way, the women could be categorized into five classes:

- those continuing with the same method, and attending the same clinic;
- those continuing with the same method, but using a different source of supply;
- those using a different method, but attending the same clinic:
- those using a different method and a different source of supply;
  - those who were not using contraception.

This classification system is thought to be more useful than those used in most previous studies, since it differentiates between women who had discontinued their initial method of contraception and those who had changed their source of supply.

## **RESULTS**

A total of 666 women were traced; of these, 27% had initially chosen the IUD, 32% oral contraceptives, and 41% injectable contraceptives. This compares with proportions of 15%, 61% and 24%, respectively, in all Bangkok clinics (4).

The sample was homogeneous. Virtually all women were Buddhist and married; 75% had 4 or fewer years of schooling, and were between 20 and 29 years old; 44% had more than 2 children (Table 1).

At the time of the interview, 74% of the women were using some form of contraception; 46% were still using their original method and attending the same clinic. This latter group comprised 55% of those originally accepting an IUD, 46% of those taking oral contraceptives, and 40% of those using DMPA (Table 2). Only 6% of the 666 women had changed their supply source while retaining their original method of contraception; 10% had changed the method used but not the supply source, and 13% had changed both.

Over two-thirds of the women who changed their source of supply also changed their method. This may be because women who want to change methods prefer to visit another clinic to receive the new method or because women were given another method when they changed clinics. Four women said they changed clinic because their initial doctor had refused to remove their IUD.

There were rather more women who continued with the same method and service among IUD users (55%) than in the other two groups. As would be expected, none of the IUD users had changed clinic without also changing method, since there was no need for them to return to the clinic at all. On the other hand, adopters of oral contraceptives had the highest rate of changing supply source while maintaining the initial method because pills are easily obtained from drug

Table 1. Characteristics of study group according to method of contraception used

	IUD" (178)	Oral contracep- tive (216)	DMPA (272)	Total (666)
Mean age (years)	26.2	25.7	27.2	26.4
Mean age at marriage (years)	20.2	20.1	20.4	20.2
Mean length of schooling (years)	5.0	5.2	4.9	5.0
Mean length of husband's schooling (years)	6.5	7.0	6.9	6.8
Percentage in employment	36	47	42	41
Mean no. of sons	1.0	0.8	1.1	1.0
Mean no. of children	2.1	1.7	2.1	2.0

<sup>&</sup>lt;sup>a</sup> Figures in brackets give no. of women in each group.

Table 2. Distribution of women at one-year follow-up, according to contraceptive method adopted initially

Status at follow-up	Contraceptive method adopted initially			
	IUD	Oral	DMPA	Total
Same method, same source (%)	55	46	40	46
Same method, different source (%)	0	14	2	6
Different method, same source (%)	11	2	15	10
Different method, different source (%)	12	7	18	13
No contraception (%)	22	31	25	26

stores. This group also had the highest discontinuation rates. DMPA acceptors had the highest rate of change of both method and service, but a relatively small proportion had changed their source while continuing with the method. This may be because of the difficulty of obtaining DMPA in other settings.

The women who had changed method were asked for their reasons; two-thirds mentioned medical side-effects, the remainder generally giving vague responses such as "inconvenience". Further questioning to determine the possible influence of husbands, relatives, or clinic personnel produced few positive responses.

As for the women who changed supply source, it has previously been noted that most (68%) also switched methods, with one-third explicitly citing method-related reasons for the change. However, women who had originally used DMPA were more likely to mention side-effects (75%) than were IUD or pill users (about 50%). Other problems were associated with the clinic itself: distance from home (27%), inconvenience of hours (19%), and crowding or husband's objection to the clinic (9%). Further evidence of dissatisfaction was seen in the responses to questions that asked the women to compare the initial and the subsequent clinic. Distance from home and the convenience of clinic hours were clearly more favorable in the new clinic (60% and 79%, respectively, found these factors to be more suitable in the second clinic). No differences were found in personal relations with clinic personnel: about one-third perceived the staff in the first clinic as more friendly, one-third the second, and one-third saw no difference between them. Further, 97% claimed that neither their husbands nor relatives objected to the clinic.

## Discontinuation of contraception

A total of 174 women were not using a contraceptive method at the time of the interview. Both openended and closed-format questions were asked to obtain reasons for this discontinuation. After examination of the responses to these questions, it was decided to classify the replies according to the following system: medical reasons (including side-effects of the method), dissatisfaction with the clinic, lack of need for contraception, and psychosocial influences. Age and education were taken into account in the analysis.

Half of the 174 women cited medical side-effects as their major reason for discontinuation. An additional 6% gave medically related reasons, e.g., fear of an allergic reaction. The second most frequent reason for abandoning contraception (cited by over 25% of the group) was the woman's feeling that she had no need for contraception; 10% had become pregnant since discontinuing, another 10% were trying to become pregnant, and 5% had lost their husbands. In response to direct questioning, one-third of the 174 women said they believed they would not become pregnant when they ceased using contraception. A total of 54 women, therefore, were fecund, sexually active, desiring not to become pregnant, but using no contraceptive method. These women justified their behaviour in terms of fear of side-effects (36%), laziness (21%), low perceived risk of pregnancy (15%), and clinic inaccessibility (10%).

## Discriminant analysis

In an attempt to ascertain the factors that distinguish the women who continued with their initial method and source from the other groups, a discriminant analysis was performed using age, age at marriage, occupation, number of years of schooling, previous use of contraceptives, number of living sons and daughters, tolerance to the inconvenience associated with contraceptive use, perceptions of the method, perceptions of the clinic, need for protection, social support, and an index of modernization (a single figure reflecting demographic, socioeconomic, and behavioural features) as the independent variables. The discriminant analysis correctly classified 73.4% of those still using their initial method and source, and 68.2% of the remainder; overall, 70.6% of the women were classified correctly. The main discriminating factor was the woman's attitude to the method; the other indices were only weakly related to continuation status. Similar analyses were conducted

<sup>&</sup>lt;sup>a</sup> Only 2 women admitted involuntary pregnancy.

on the individual groups; again, the only significant variable was the woman's attitude to the method.

#### DISCUSSION

One of the aims of this project was to devise a scheme that could be adopted in diverse settings and would permit precise classification of the status of women as regards contraception. A second aim was to determine the important factors associated with discontinuation of contraception. These two goals were only partly realized; the classification of the women was felt to be useful and could, if widely adopted, help clarify the findings of research. The attempt to devise a scheme for identifying the major reasons for discontinuation of contraception was, however, less successful. The clinical and psychosocial variables considered were found to be mostly unrelated to

continuation status. A recent WHO multinational study of the "paper" pill and conventional oral contraceptives (5) found that the major influence on the woman's attitude was her perception of the method at the time she arrived at the family planning clinic, i.e., before using the method. This study tends to confirm the conclusion that preconceived ideas of a contraceptive method, rather than the side-effects experienced, may play a leading role in determining whether the method will continue to be used.

As would be expected, the findings of this study are similar to those of the earlier project in Bangkok (4). The percentage of women continuing with the IUD was 55% in the present study and 59% in the earlier one; for women using oral contraceptives, the respective proportions were 46% and 51%, and for DMPA users, 40% and 45%. In both studies, side-effects were the major reason cited for discontinuing a particular method.

## **ACKNOWLEDGEMENTS**

The authors wish to thank Dr J. M. Stycos, Cornell University, NY, USA, and Dr J. Marshall, formerly with the World Health Organization, Geneva, Switzerland, who helped prepare the manuscript. The study was supported financially by the Special Programme of Research, Development, and Research Training in Human Reproduction of the World Health Organization.

# **RÉSUMÉ**

## ENOUÊTE SUR LA CONTRACEPTION FÉMININE À BANGKOK: CAUSES DES ABANDONS CONSTATÉS

Les taux élevés d'abandon sont l'un des problèmes majeurs auxquels se heurtent les programmes de planification familiale; le terme «abandon» ne veut d'ailleurs pas toujours dire la même chose suivant les contextes. Afin d'étudier plus en détail les raisons pour lesquelles les utilisatrices abandonnent un moyen contraceptif donné, on a entrepris à Bangkok un projet de recherche qui comportait deux objectifs principaux: 1) élaborer et mettre à l'essai un système de classification permettant de caractériser avec précision les sujets inclus dans l'étude; et 2) vérifier dans le détail les raisons (médicales, liées aux prestations et psychosociales) de l'abandon du moyen contraceptif. Un total de 666 femmes qui avaient accepté d'utiliser un dispositif intrautérin (DIU), un contraceptif oral ou un contraceptif injectable fourni par l'un des 14 dispensaires de Bangkok sur lesquels portait le projet ont été suivies et interrogées au bout d'un an.

Trois facteurs ont été pris en considération: 1) la femme utilisait-elle une méthode contraceptive au moment de l'entretien? 2) si oui, était-ce celle qui avait été adoptée à l'origine? 3) si la femme utilisait la contraception, était-elle approvisionnée par la même source?

On a ainsi pu classer les femmes en cinq catégories:

— celles qui continuaient d'utiliser la même méthode et de se rendre dans le même dispensaire;

- celles qui continuaient d'utiliser la même méthode mais avec une autre source d'approvisionnement:
- celles qui utilisaient une autre méthode tout en se rendant dans le même dispensaire;
- celles qui utilisaient une autre méthode et une autre source d'approvisionnement;
  - celles qui n'avaient pas recours à la contraception.

Au moment de l'enquête, 74% des femmes utilisaient une forme ou une autre de contraception; 46% des femmes qui ont répondu continuaient d'utiliser la méthode initiale et de se rendre dans le même dispensaire. Parmi elles, 55% utilisaient un DIU, 46% prenaient des contraceptifs oraux et 40% des contraceptifs injectables. Seules 6% des 666 femmes avaient changé de source d'approvisionnement tout en continuant à utiliser la méthode contraceptive initiale; 10% avaient changé de méthode mais pas de source d'approvisionnement et 13% avaient changé les deux.

Sur les 174 femmes qui n'utilisaient pas de méthode contraceptive au moment de l'enquête, la moitié a évoqué les effets médicaux secondaires comme principale raison de l'abandon. D'autre part, 6% ont donné des raisons d'ordre paramédical, par exemple crainte d'une réaction allergique. La deuxième raison la plus fréquente d'abandon de la méthode contraceptive était l'impression de ne pas avoir besoin de la contraception. Répondant à des questions

directes, un tiers des femmes ayant abandonné ont dit être convaincues qu'elles ne seraient pas enceintes si elles cessaient d'utiliser un moyen contraceptif. Mis à part les femmes qui voulaient un enfant, 54 femmes étaient fécondes, sexuellement actives et ne voulaient pas se retrouver enceintes. Ces femmes ont justifié leur comportement en évoquant la crainte d'effets secondaires (36%), la

paresse (21%), la perception très vague du risque de grossesse (15%) et la difficulté d'accès du dispensaire (10%).

L'étude a néanmoins montré que les idées préconçues sur une méthode contraceptive, plus que les effets secondaires ressentis, jouaient sans doute un rôle majeur dans la décision de continuer ou non à utiliser la méthode.

## REFERENCES

- MAULDIN, P. Experience with contraceptive methods in less developed countries. Center for Policy Studies, Working Paper No. 30, New York, Population Council, 1978.
- 2. ZEIDENSTEIN, G. The user perspective: an evolutionary step in contraceptive service programs. Studies in family planning, 11: 24-29 (1980).
- KREAGER, P. Family planning dropouts reconsidered. London, International Planned Parenthood Federation, 1977.
- 4. CHUMNIJARAKIJ, T. ET AL. A study of contraceptive choice and use in Bangkok metropolis health clinics. Contraception, 24: 245-258 (1981).
- 5. WHO SPECIAL PROGRAMME OF RESEARCH, DEVELOP-MENT AND TRAINING IN HUMAN REPRODUCTION. A comparison of an oral contraceptive tablet and paper pill: the results of a multicentred clinical trial. Studies in family planning (in press).